

CLAIMS

What is claimed is:

- 1 1. A method comprising:
 - 2 receiving a request for a data stream from a client;
 - 3 sampling the data stream;
 - 4 generating one or more fingerprint blocks for one or more sampled portions of
 - 5 the data stream;
 - 6 sending one or more fingerprint blocks to the client; and
 - 7 sending the data stream to the client.
- 1 2. The method of claim 1, comprising sending to the client parameters for
- 2 sampling the data stream.
- 1 3. The method of claim 1, wherein generating one or more fingerprint blocks
- 2 comprises generating cyclic redundancy check (CRC) values for the one or more
- 3 sampled portions of the data stream.
- 1 4. A method comprising:
 - 2 requesting a data stream by a client from a server;
 - 3 receiving the data stream by the client;
 - 4 sampling the data stream at the client;
 - 5 generating one or more fingerprint blocks for one or more sampled portions of
 - 6 the data stream at the client; and
 - 7 comparing one or more fingerprint blocks generated at the client to one or more
 - 8 fingerprint blocks generated at the server.

1 5. The method of claim 4, comprising obtaining by the client one or more
2 fingerprint blocks generated at the server.

1 6. The method of claim 4, comprising generating an error message at the client if
2 one or more fingerprint blocks generated at the client do not match one or more
3 fingerprint blocks generated at the server.

1 7. The method of claim 4, comprising communicating an error message to the
2 server from the client if one or more fingerprint blocks generated at the client do not
3 match one or more fingerprint blocks generated at the server.

1 8. The method of claim 4, comprising communicating a valid status message to the
2 server from the client if one or more fingerprint blocks generated at the client match
3 one or more fingerprint blocks generated at the server.

1 9. A method comprising:
2 requesting a data stream from a server by a client;
3 sampling the data stream at the server;
4 generating one or more fingerprint blocks for one or more sampled portions of
5 the data stream at the server;
6 sending the data stream from the server to the client;
7 receiving the data stream by the client;
8 sampling the data stream at the client;
9 generating one or more fingerprint blocks for one or more sampled portions of
10 the data stream at the client; and

11 comparing one or more fingerprint blocks generated at the client to one or more
12 fingerprint blocks generated at the server.

1 10. The method of claim 9, comprising sending one or more fingerprint blocks
2 generated at the server to the client.

1 11. The method of claim 9, comprising communicating an error message to the
2 server from the client if a threshold percentage of one or more fingerprint blocks
3 generated at the client do not match one or more fingerprint blocks generated at the
4 server.

1 12. The method of claim 10, wherein:
2 sending one or more fingerprint blocks generated at the server to the client
3 comprises sending one or more fingerprint blocks to the client through a first
4 connection between the server and the client; and
5 sending the data stream to the client comprises sending the data stream to the
6 client through a second connection between the server and the client.

1 13. The method of claim 9, wherein generating one or more fingerprint blocks at the
2 server comprises generating cyclic redundancy check (CRC) values for one or more
3 sampled portions of the data stream.

1 14. The method of claim 9, comprising:
2 communicating a valid status message from the client to the server if a threshold
3 percentage of one or more fingerprint blocks generated at the client match one or more
4 fingerprint blocks generated at the server; and

5 generating an error message at the server if the valid status message is not
6 received in a predetermined amount of time.

1 15. An apparatus comprising:
2 an encoder to encode a media signal to create a data stream of encoded data;
3 a fingerprint block generator to sample the data stream and to generate one or
4 more fingerprint blocks for one or more sampled portions of the data stream; and
5 a packetizer to fragment the data stream to create one or more data packets
6 comprising the encoded data to send to a client.

1 16. The apparatus of claim 15, wherein the fingerprint block generator comprises
2 circuitry.

1 17. The apparatus of claim 15, wherein the fingerprint block generator generates
2 one or more fingerprint blocks by generating cyclic redundancy check (CRC) values for
3 one or more sampled portions of the data stream.

1 18. The apparatus of claim 15, wherein the packetizer creates one or more data
2 packets containing one or more fingerprint blocks generated by the fingerprint block
3 generator.

1 19. A client comprising:
2 a processor; and
3 a memory coupled to said processor having stored therein a set of instructions to
4 cause said processor to request a data stream from a server, to receive the data stream,
5 to sample the data stream, to generate one or more fingerprint blocks for one or more

6 sampled portions of the data stream at the client, and to compare one or more
7 fingerprint blocks generated at the client to one or more fingerprint blocks generated at
8 the server.

1 20. The client of claim 19, wherein the set of instructions comprises instructions to
2 cause the processor to obtain one or more fingerprint blocks generated at the server.

1 21. The client of claim 19, wherein the set of instructions comprises instructions to
2 cause the processor to communicate an error message to the server if one or more
3 fingerprint blocks generated at the client do not match one or more fingerprint blocks
4 generated at the server.

1 22. The client of claim 19, wherein the set of instructions comprises instructions to
2 cause the processor to communicate a valid status message to the server if one or more
3 fingerprint blocks generated at the client match one or more fingerprint blocks
4 generated at the server.

1 23. A system comprising:
2 a server comprising a first processor and a first memory coupled to the first
3 processor having stored therein a first set of instructions to cause the first processor to
4 receive a request for a data stream from a client, to sample the data stream, to generate
5 one or more fingerprint blocks for one or more sampled portions of the data stream, to
6 send the one or more fingerprint blocks to the client, and to send the data stream to the
7 client; and

8 a client comprising a second processor and a second memory coupled to the
9 second processor having stored therein a second set of instructions to cause the second

10 processor to request the data stream from the server, to receive one or more fingerprint
11 blocks generated at the server, to receive the data stream, to sample the data stream, to
12 generate one or more fingerprint blocks at the client for one or more sampled portions
13 of the data stream, and to compare one or more fingerprint blocks generated at the
14 client to one or more fingerprint blocks generated at the server.

1 24. The system of claim 23, wherein the first set of instructions comprises
2 instructions to cause the first processor to generate the one or more fingerprint blocks
3 by generating cyclic redundancy check (CRC) values for one or more sampled portions
4 of the data stream.

1 25. The system of claim 23, wherein the second set of instructions comprises
2 instructions to cause the second processor to generate an error message at the client if a
3 threshold percentage of one or more fingerprint blocks generated at the client do not
4 match one or more fingerprint blocks generated at the server.

1 26. The system of claim 25, wherein the threshold percentage is adjustable.

1 27. The system of claim 23, wherein the second set of instructions comprises
2 instructions to cause the second processor to generate a log file to store results of
3 comparing one or more fingerprint blocks generated at the client to one or more
4 fingerprint blocks generated at the server.

1 28. A machine readable medium having stored therein a plurality of machine
2 readable instructions for execution by a processor, the machine readable instructions
3 to:

4 receive a request for a data stream from a client;
5 sample the data stream;
6 generate one or more fingerprint blocks for one or more sampled portions of the
7 data stream;
8 send one or more fingerprint blocks to the client; and
9 send the data stream to the client.

1 29. The machine readable medium of claim 28, wherein the machine readable
2 instructions comprise instructions to generate one or more fingerprint blocks by
3 generating cyclic redundancy check (CRC) values for the one or more sampled portions
4 of the data stream.

1 30. The machine readable medium of claim 28, wherein the machine readable
2 instructions comprise instructions to send to the client parameters for sampling the data
3 stream.